

**Rhode Island Department of Health
Special Pathogens Laboratory
50 Orms Street
Providence, RI 02904
401-222-5586**

COLLECTION KIT FOR B. PERTUSSIS PCR/DFA AND CULTURE

STORAGE:

Regan-Lowe (R-L) transport media is to be stored refrigerated at 2-8°C.
Do not allow the media to freeze at any time.

COLLECTION PROCEDURE:

1. Remove the transport media from the refrigerator. Verify that the media has not reached the expiration date. **DO NOT use expired media.** Specimens received in expired media will be rejected for culture. Do not use the media if it shows signs of breakage, leakage, or contamination.
2. Allow the media to warm to room temperature for at least 15 minutes before collecting the specimens.
3. Label the transport media with the patient's name.
4. Fill out a HEALTH Laboratory Requisition Form **completely** and **legibly**. Refer to reverse side of HEALTH Laboratory Requisition Form for proper source codes.
5. Collect the specimen under the following conditions for optimal laboratory results:
 - a. Collect the specimen as early in the course of illness as possible.
 - b. Collect the specimen prior to the use of antibiotics.
 - c. The use of a nasal speculum is optional.
6. Collect the specimen as follows:
 - a. With the patient's head stationary, the flexible calcium alginate tipped swab is gently inserted into the nostril until it reaches the posterior nares and is left in place for 30-60 seconds. The tickling sensation of the swab usually induces a cough. Proper placement of the swab and duration of swab exposure to the posterior nares is essential to obtain an adequate specimen.
 - b. Repeat with the other nostril using a second calcium alginate tipped swab.
 - c. Insert **both swab tips** into the same R-L transport media. The swab tip must be completely immersed in the medium for proper transport. Bend the end of the wire over the edge of the tube, and replace the cap tightly.
 - d. Place the R-L tube and HEALTH Laboratory Requisition Form in the plastic specimen transport bag provided.

HOLDING and TRANSPORT:

Specimens should be transported to HEALTH Laboratory **as soon as possible** after collection. Contaminating bacteria grow at a much faster rate than *B. pertussis* and can decrease the likelihood of recovery and result in a false negative result.

If it becomes necessary to hold a specimen prior to delivery:

1. Transport within 24-48 hours of collection; hold at ambient temperature.
2. If transport is delayed beyond 48 hours, the specimen should be moved to a refrigerator (2-8°C) until transport.
3. Specimens received in excess of five (5) days from collection will be rejected.

ADDITIONAL IMPORTANT INFORMATION:

1. Good laboratory technique cannot compensate for a poor quality specimen.
2. Both sides of the nasopharynx should be cultured as this enhances the chances of recovering *B. pertussis*. A separate swab should be used for each side.
3. Only calcium alginate tipped nasopharyngeal swabs are acceptable for collection. HEALTH Laboratory provides these swabs in addition to the R-L transport media. Standard cotton tipped swabs are unacceptable as they are toxic to the organism.
4. The nasopharynx is the required site for culture. Throat and nasal swabs will be accepted **ONLY** when accompanied by a nasopharyngeal swab and must also be collected on calcium alginate swabs. A separate transport tube and requisition form is required for each additional source submitted.
5. The nasopharyngeal swabs should be left in the transport tube when transporting. Stabbing the media and removing the swabs is unacceptable and the PCR/DFA and culture will not be completed.

ORDERING KITS and HEALTH Laboratory Requisition Forms:

Kits containing instructions, R-L transport media, and calcium alginate tipped nasopharyngeal swabs are available from HEALTH Laboratory Central Receiving in quantities of 5 or 10 R-L tubes.

To order more HEALTH Laboratory Requisition Forms, please contact HEALTH Laboratory Central Receiving at 222-5548 or 222-5549.

QUESTIONS:

If there are questions regarding specimen collection, transport, or reporting of results for *B. pertussis* PCR/DFA and culture, please contact the Special Pathogens Laboratory at 222-5586.

RESULTS:

HEALTH Laboratory will call results on PCR/DFA and/or culture **POSITIVE** patients only.